

THAYER, ELI

DRAWER 10C

CONTEMPORARIES

2020.025.03905



Abraham Lincoln's Contemporaries

Eli Thayer

Excerpts from newspapers and other
sources

From the files of the
Lincoln Financial Foundation Collection

A faint, light gray watermark of the Lincoln Memorial is visible in the background. The watermark shows the building's iconic portico with its 30 Corinthian columns and the central Lincoln statue. The text 'Digitized by the Internet Archive in 2013' is overlaid on this watermark.

Digitized by the Internet Archive
in 2013

<http://archive.org/details/abrahamlincolnsctlinc>



Lincoln Lore

November, 1976

Bulletin of The Lincoln National Life Foundation...Mark E. Neely, Jr., Editor. Published each month
by The Lincoln National Life Insurance Company, Fort Wayne, Indiana 46801.

Number 1665

“... one of the little breech-loading cannons I got of Hon. Eli Thayer.”

Editor's Note: Important credits for this issue go to Dr. Jack P. Covell, researcher, restorer, and owner of the piece under discussion; to Gary L. Delscamp, researcher and photographer; to Russell E. Thornton, who discovered the patent mark, and to Donald E. Thornton, who helped his father.

M. E. N., Jr.

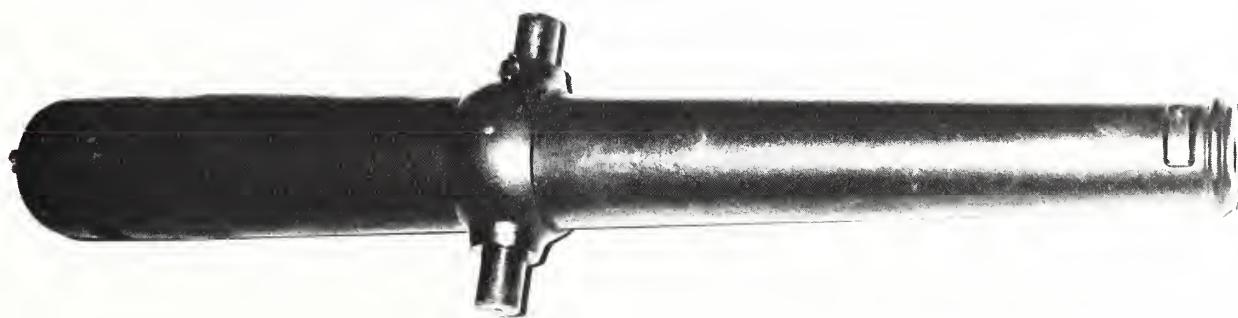
About a year before he won election to the Presidency, Abraham Lincoln asserted that the three discoveries and inventions of greatest value to the human race were “the arts of writing and of printing — the discovery of America, and the introduction of Patent-laws.” These were of crucial importance, he said, because they served to facilitate all other discoveries and inventions since. Probably only a few patent lawyers would still rate the introduction of patent laws on a par with the discovery of America and the development of writing and printing, but this serves well to reveal a peculiar trait in Abraham Lincoln’s character: he was fascinated by technological innovations.

Lincoln’s weakness for inventions would have large effects when he became President of the United States. The Army was of the mind that no invention could be developed fast enough to have any profound effect on the war at hand; therefore, it turned a deaf ear to the horde of inventors who descended on Washington with their various, curious, and sometimes efficiently lethal wares. These innovative Yankees quickly learned that their chances for a real hearing by the War Department were much enhanced if they could only get to Lincoln, persuade him of the merit of their schemes, and then be sent to the War Department with a request from the Presi-

dent that they be given a fair hearing. So much of this activity went on, in fact, that Robert V. Bruce managed to write one of the more ingenious (and lively) books in the whole field of Lincolniana, *Lincoln and the Tools of War*, in which he related the stories of dozens of inventions and their encounters with President Lincoln and the War Department.

Among those inventions the acceptance of which spoke well for Lincoln’s ability to forecast the technological future, was a curiously elusive piece of artillery called, for no very good reason, “The Ellsworth Gun.” Muzzle-loaders and smooth-bores were very quickly a thing of the past after the American Civil War, and this little cannon was, therefore, a milestone in the history of American artillery: it was the only American breech-loading rifled cannon purchased by the War Department during the Civil War.

Unfortunately, the Ellsworth Gun was not as epoch-making in American military history as it was in the history of American technology. Fewer than fifty of the cannons were produced, and despite their association with some of the war’s more colorful commanders, Elmer Ellsworth, Benjamin F. Butler, and John C. Frémont, they proved to be rather ill-starred in combat. A number were captured by the Confederates in the Shenandoah Valley campaign of 1862 against General Frémont, and others found their way to out-of-the-way and inglorious theaters of combat. As Professor Bruce puts it, “By 1863 all the Ellsworth guns had vanished into limbo or Dixie.” Until recently, none has been seen, but a candidate for being one of the long-lost little cannons has come to the attention of *Lincoln Lore*, and we are happy to have the exclusive right of reporting this find.



Courtesy G. L. Delscamp

FIGURE 1. This is a photograph of the recently discovered barrel of a small cannon. Taken just two months ago, it shows a small square hole near the breech in the lower left-hand corner of the picture. Two metal wedges and a tray to hold them have been removed to expose the holes. FIGURES 2 and 3 on page 2 show the breech before the wedges and other attachments were removed. Note the number “5” which appears on the trunnion, the metal sleeve around the middle of the barrel from which the cylindrical rods which rested on the carriage protrude.



FIGURE 2. This photograph shows the right side of the breech. The two metal wedges rest one atop the other in the tray. The lower wedge had a handle which protruded parallel to the axis of the barrel. By pushing it away from the barrel, it caused the wedges to work against each other, loosen the interior breech mechanism, and finally slide out into the tray. The rings probably had chains on them which kept the wedges from being lost from the barrel.

Courtesy G. L. Delscamp

All modern accounts of the Ellsworth gun, for which no patent models, drawings, or plans have ever been found, are based on Bruce's pioneering study, and here is the substance of that account:

Having bought manufacturing rights to B. F. Joslyn's new breech-loading rifle, the imaginative Yankee [Eli Thayer] applied the same design to a little breech-loading fieldpiece and sent a dozen specimens out to chastise the Kansas "border ruffians." In April 1861, when the conflict flared up again on a continental scale, Thayer sold two of his little cannon to the Union Defense Committee of New York, for the use of Elmer Ellsworth's Zouave regiment. Thereafter he called his cannon the "Ellsworth Gun."

This curious hybrid, somewhere between a Brobdingnagian rifle and a Lilliputian cannon, fell under Lincoln's interested scrutiny in September 1861. The gun Lincoln saw

was four feet long, had a 1 1/2-inch bore and weighed about three hundred pounds without its carriage. Like the Joslyn rifle, its breech mechanism consisted of a cone and expanding rings, held in place by a tapered steel key which passed through the shank of the breech and was operated by a compound lever. A handle opened the breech piece. The conical chilled-iron ball, wound with tallow-soaked cord, fitted into a cup at the end of a brass cartridge; and the 3-ounce charge was ignited through perforations near the other end. Instead of a limber, the carriage had a drag rope attached for hauling by manpower.

Thayer made much of the gun's maneuverability, cheapness and rapidity of fire; and Lincoln at last consented to order twenty guns at \$350 each, subject to the inspection of McClellan's chief ordnance officer

From 1863, when the cannons disappear from the official re-



FIGURE 3. This is the left side of the breech. The two wedges protrude slightly above the surface of the barrel, just behind the device which must have cradled a sight of some sort. The bore of the rifled cannon was so small that it fired a very small projectile which could not have been very destructive and had, therefore, to be accurately placed. The hole above the breech is a mystery, but it may have held a level. Since the rifle had a range of three miles, it doubtless had to have a telescopic sight on it.

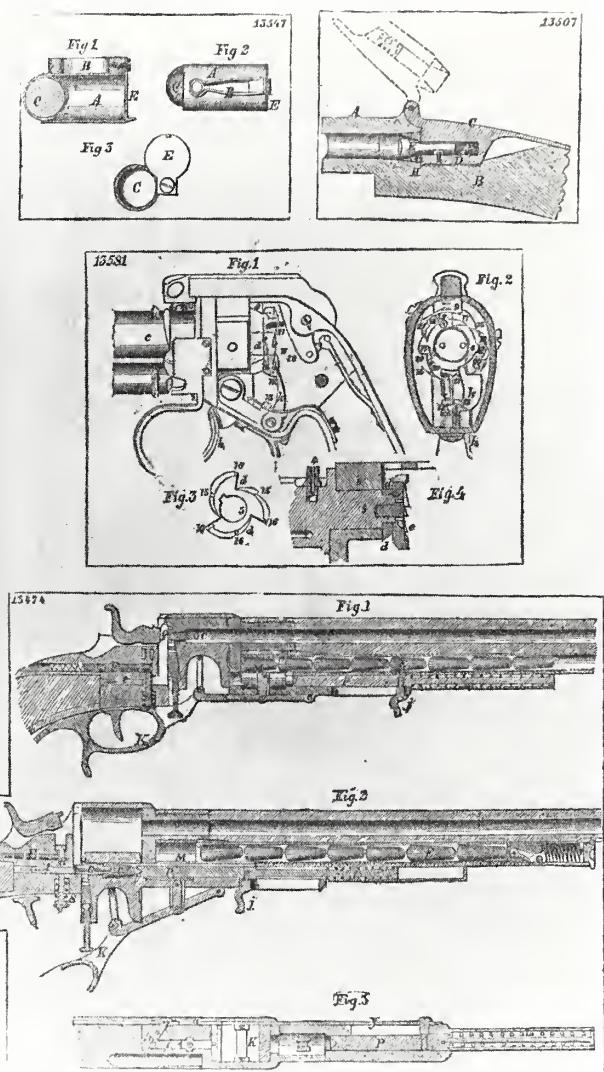
Courtesy G. L. Delscamp

ords, until June, 1974, when a cannon barrel was purchased by two gun collectors from a man who had acquired it to decorate his rock garden, there has been no evidence of the Ellsworth cannon. The barrel in question did not provoke much interest at first. The two gun collectors made a five-minute examination, decided that the little piece must have been the sort used to throw lines of rope from distressed ships to shore or *vice versa*, and within half an hour sold the barrel to a local firearms dealer as a curiosity or advertising piece for his store. The dealer had the barrel for six days. He removed some of the coat of thick black paint which covered the barrel and found a patent mark. Having been in the gun business for thirty years, the dealer had acquired some standard references on the history of weapons. Checking *The Breech-Loader in the Service*, he found the patent date listed there and realized that he had probably acquired a breech-loading Civil War piece rather than a line-throwing gun. He had no reason to believe that these were not produced by the thousands and happily sold the gun for about 700% profit to two men who frequented his shop.

These two men, Dr. Jack Covell and G. L. Delscamp, were better equipped to evaluate the significance of the little field-piece. Dr. Covell is a gun collector with a solid technical knowledge of the practical workings of firearms, though twentieth-century weapons are his specialty. Mr. Delscamp is a recent college graduate with a degree in history and an ability to find his way around a library. Between them, they decided that the cannon barrel was no ordinary piece from the standard arsenal of Civil War weapons but the rare Ellsworth cannon, and they went to work to clean up the gun and prove their point. This work has taken two years of incredible efforts in garages and machine shops. Along the way, Mr. Delscamp lost interest and sold his share to Dr. Covell, who has continued the machine-shop work and the thankless process of writing and telephoning experts in the history of weaponry. Of course, there can be no real expert on a gun no one has ever seen so much as a picture of, and these efforts have not been altogether successful. Moreover, the desire to keep the barrel in good shape for posterity and the limited means available to an ordinary citizen who does not own a foundry have prevented exerting the kinds of force and violence on the piece that might open it up and prove the way its mechanism works. Nevertheless, the evidence for Dr. Covell's little cannon is substantial.

The dimensions seem to fit the existing word descriptions of the Ellsworth Gun. The barrel weighs around 290 pounds, is four feet long, and has a 1 1/2-inch bore. It is no line-throwing gun because the barrel is rifled, and the spin imparted by rifling would only serve to snarl a rope flying through the air. Although the breech plug is apparently firmly shut with rust and corrosion and the breech has not yet been opened, the cannon must be a breech-loader. Otherwise, there is no reason for the presence of the curious-looking compound wedges which protrude from the side of the piece and penetrate through the other side. These wedges operated by a handle which, though broken off and stuffed in the muzzle (along with a lot of rocks, debris, and what looked like red Georgia clay), extended parallel to the axis of the barrel from the circular protrusion on the breech-side of the upper wedge. Strenuous efforts have caused these wedges to move and, in fact, be removed from the cannon. But they did not do what doubtless they were meant to do before the breech plug rusted, force the breech plug out so that the barrel could be loaded from the rear.

All of these pieces of evidence might add up only to the fact that the barrel is that of a small old rifled cannon with a curious system of wedges near the breech. The important piece of evidence, however, is that patent date which first made the gun dealer realize he had something more than a seacoast curiosity. Stamped on the breech near the protuding plug is:



From the Lincoln National Life Foundation

FIGURE 4. This page from the plates of the *Report of the Commissioner of Patents for the Year 1855* contains the diagram of the B. F. Joslyn patent in the upper right-hand corner.

PATENTED
AUG. 28TH, 1855

A check of the *Report of the Commissioner of Patents for the Year 1855* reveals that only one patent was issued on that date for a firearms device. It was patent number 13,507, issued to B. F. Joslyn for an "Improvement in Breech-loading Firearms." It was the Joslyn patent which Eli Thayer purchased and adapted for use in a small rifled cannon.

In a letter to President Lincoln written on September 21, 1861, Thayer advised the organization of companies of soldiers armed with twenty of these weapons, which, he claimed, combined the advantages of artillery and infantry rifles. So light in weight (he claimed they weighed in at something like 200 or 225 pounds — quite an underestimate) that they could be pulled into place by men rather than horses and so small that they could be placed anywhere a rifleman could, the Ellsworth Guns nevertheless fired a seventeen-ounce ball a distance of three miles (at three degrees elevation), that is, artillery and not infantry range. Moreover, only a small number of men was required to operate the guns (he did not say precisely how small a number), and they could easily get off twenty rounds per minute. Thayer gave as his address Wil-



Courtesy G. L. Delscamp

FIGURE 5. This close-up photograph of the muzzle shows the rifling (visible at the edge of the shadows at the lower right of the bore).

lard's Hotel in Washington, and he had doubtless come down from Massachusetts to lobby for the purchase of the Ellsworth cannon — at what he claimed was a very low price, especially when compared to ordinary field artillery.

Thayer, an ex-Congressman and a maverick Republican who had voted for Lincoln's nomination at the Wigwam, had some influence. Three days later Lincoln drew up a memorandum for purchase of "twenty guns. . . . made equal, or superior to the Ellsworth gun" at \$350 each. Lincoln noted that the gun had recently been exhibited to him. The twenty cannons were

manufactured in Thayer's home town, Worcester, Massachusetts, by L. W. Pond at the factory of Goddard, Rice & Company. Some improvements were made on the model Lincoln had seen, because Charles Kingsbury, who examined the guns in November for the Army, reported that the "cannon rifles" were superior to what he had seen before with Lincoln. The improvements were wide-ranging enough for L. W. Pond to claim that the cannon was his own invention, or so, at least, *The Scientific American* reported in December.

The barrel under discussion here has no other identifying marks than those already mentioned — except the numeral "5" which appears in five different places on the barrel. This numeral, if a serial number, is consistent with the small number of cannons known to have been produced. While in itself it provides no conclusive evidence, it at least does not have to be explained away, as a higher number, in the hundreds, say, would have to be. The device on the side of the breech opposite the wedges is not mentioned in any of the literature on the Ellsworth Gun, but it might be a part of a sighting device, perhaps added as an improvement by L. W. Pond.

The positive proof of the identity of the barrel still lies immobile in the breech. Only the system of rings, pin, and cone will provide sure identification for the Ellsworth Gun, for it is distinguished by its B. F. Joslyn-patented breech device. From all other outward appearances, however, this could well be the long-lost Ellsworth cannon. If it is, it is a significant artifact for Lincoln students (as well as military historians and students of the history of American technology). Abraham Lincoln seems to have been very keen on the little cannon's possibilities, and when a Mr. Hegon visited him later, the President instructed Colonel George D. Ramsay to "show him one of the little breech-loading cannons I got of Hon. Eli Thayer." It was quite an innovative piece of weaponry, and President Lincoln had personally seen to its acceptance by the Army, even to the point of drawing up the terms of the contract and, on December 3, 1861, signing the manufacturer's bill for \$8811.87, "I advise that the above account be paid. A. Lincoln."



Courtesy G. L. Delscamp

FIGURE 6. The all-important patent mark appears, alas, in an awkward place. It is just above the breech plug. Early owners of the barrel apparently damaged the mark in trying to remove the plug. The "T" is partly obliterated, as is most of the "8"; however, the beginnings of both of the loops in the "8" are visible on the side near the "2".

}{
}
;
;

3
2
1
0
-1
-2
-3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
229
230
231
232
233
234
235
236
237
238
239
239
240
241
242
243
244
245
246
247
248
249
249
250
251
252
253
254
255
256
257
258
259
259
260
261
262
263
264
265
266
267
268
269
269
270
271
272
273
274
275
276
277
278
279
279
280
281
282
283
284
285
286
287
288
289
289
290
291
292
293
294
295
296
297
298
299
299
300
301
302
303
304
305
306
307
308
309
309
310
311
312
313
314
315
316
317
318
319
319
320
321
322
323
324
325
326
327
328
329
329
330
331
332
333
334
335
336
337
338
339
339
340
341
342
343
344
345
346
347
348
349
349
350
351
352
353
354
355
356
357
358
359
359
360
361
362
363
364
365
366
367
368
369
369
370
371
372
373
374
375
376
377
378
379
379
380
381
382
383
384
385
386
387
388
389
389
390
391
392
393
394
395
396
397
398
398
399
399
400
401
402
403
404
405
406
407
408
409
409
410
411
412
413
414
415
416
417
418
419
419
420
421
422
423
424
425
426
427
428
429
429
430
431
432
433
434
435
436
437
438
439
439
440
441
442
443
444
445
446
447
448
449
449
450
451
452
453
454
455
456
457
458
459
459
460
461
462
463
464
465
466
467
468
469
469
470
471
472
473
474
475
476
477
478
479
479
480
481
482
483
484
485
486
487
488
489
489
490
491
492
493
494
495
496
497
498
498
499
499
500
501
502
503
504
505
506
507
508
509
509
510
511
512
513
514
515
516
517
518
519
519
520
521
522
523
524
525
526
527
528
529
529
530
531
532
533
534
535
536
537
538
539
539
540
541
542
543
544
545
546
547
548
549
549
550
551
552
553
554
555
556
557
558
559
559
560
561
562
563
564
565
566
567
568
569
569
570
571
572
573
574
575
576
577
578
579
579
580
581
582
583
584
585
586
587
588
589
589
590
591
592
593
594
595
596
597
598
598
599
599
600
601
602
603
604
605
606
607
608
609
609
610
611
612
613
614
615
616
617
618
619
619
620
621
622
623
624
625
626
627
628
629
629
630
631
632
633
634
635
636
637
638
639
639
640
641
642
643
644
645
646
647
648
649
649
650
651
652
653
654
655
656
657
658
659
659
660
661
662
663
664
665
666
667
668
669
669
670
671
672
673
674
675
676
677
678
679
679
680
681
682
683
684
685
686
687
688
689
689
690
691
692
693
694
695
696
697
698
698
699
699
700
701
702
703
704
705
706
707
708
709
709
710
711
712
713
714
715
716
717
718
719
719
720
721
722
723
724
725
726
727
728
729
729
730
731
732
733
734
735
736
737
738
739
739
740
741
742
743
744
745
746
747
748
749
749
750
751
752
753
754
755
756
757
758
759
759
760
761
762
763
764
765
766
767
768
769
769
770
771
772
773
774
775
776
777
778
779
779
780
781
782
783
784
785
786
787
788
789
789
790
791
792
793
794
795
796
797
798
798
799
799
800
801
802
803
804
805
806
807
808
809
809
810
811
812
813
814
815
816
817
818
819
819
820
821
822
823
824
825
826
827
828
829
829
830
831
832
833
834
835
836
837
838
839
839
840
841
842
843
844
845
846
847
848
849
849
850
851
852
853
854
855
856
857
858
859
859
860
861
862
863
864
865
866
867
868
869
869
870
871
872
873
874
875
876
877
878
879
879
880
881
882
883
884
885
886
887
888
889
889
890
891
892
893
894
895
896
897
898
898
899
899
900
901
902
903
904
905
906
907
908
909
909
910
911
912
913
914
915
916
917
918
919
919
920
921
922
923
924
925
926
927
928
929
929
930
931
932
933
934
935
936
937
938
939
939
940
941
942
943
944
945
946
947
948
949
949
950
951
952
953
954
955
956
957
958
959
959
960
961
962
963
964
965
966
967
968
969
969
970
971
972
973
974
975
976
977
978
979
979
980
981
982
983
984
985
986
987
988
989
989
990
991
992
993
994
995
996
997
998
999
999
1000